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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,212	02/18/2000	Seiji Yamashita	P 00 572.006	8199
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EXAMINER				
TRAN, THAO T				
ART UNIT		PAPER NUMBER		
1711				

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

09/507,212

Applicant(s)

YAMASHITA, SEIJI

Examiner

Thao T. Tran

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,10-14,21,26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) 1,3,4,14,21 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This is in response to the Amendments received on September 08, 2003. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action
2. Claims 1, 3-4, 10-14, 21, 26-27 are currently pending in this application. Claims 2, 5-9, 15-20, 22-25 have been canceled. Claims 26-27 have been newly added.
3. Claims 1, 3-4, 21 and 26 have been withdrawn from further consideration as non-elected inventions as set forth in Paper No. 4.
4. Claims 10-13, and 27 have been elected by original presentation in Paper No. 4 and therefore are being examined below.

Claim Rejections - 35 USC § 102

5. In view of the Office Action of July 9, 2003, the rejection of claims 10-11 and 23 under 35 U.S.C. 102(b) as being anticipated by Taoda et al. (US Pat. 5,562,820) has been withdrawn due to the Amendments made thereto.
6. In view of the Office Action of July 9, 2003, the rejection of claims 10-13, and 23 under 35 U.S.C. 102(e) as being anticipated by Goto et al. (US Pat. 6,235,358) has been withdrawn due to the Amendments made thereto.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 10-11 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taoda in view of Nyseth (US Pat. 5,575,394).

Taoda teaches an apparatus for reducing particle contamination (vessel for treating polluted water), comprising a plastic container (vessel or substrate) and a coating of titanium dioxide on selected portions of the container (see abstract; col. 3, ln. 3-13). The examiner is interpreting that selected portions of the container being the container.

In regards to claim 10, although the reference is silent with respect to “the titanium dioxide coating attracting atmospheric water molecules to produce a hydrophilic surface on the container for facilitating cleaning the container”, since the reference teaches the same titanium dioxide coating as that in the instantly claimed invention, the titanium dioxide coating of the reference would inherently attract water molecules to produce a hydrophilic surface on the container.

Moreover, with respect to the limitation, “so as to attract atmospheric water molecules to produce a hydrophilic surface on the container for facilitating cleaning the container”; it has been well settled that limitations on the properties of the material worked upon or functional limitations have been held to have insignificant patentable weight in an apparatus claim. See **MPEP** 2114-2115.

With respect to the preamble “for reducing particle contamination of an article” and the limitation “adapted for holding the article”; it has been within the skill in the art that an intended use clause in the preamble would have very little significant patentable weight in a method or apparatus claim. See **MPEP** 2111.02. Moreover, the limitation “adapted for holding the article” is not a positive limitation. In addition, since the prior art teaches a plastic container, a container should be able to hold an article; and since the prior art’s container is also coated with titanium dioxide, the prior art’s container should be able to perform the same function as that in the instant claim.

Taoda differs from the instant invention because the reference does not teach at least one semiconductor wafer disposed in the container. However, Taoda teaches the container holding the water to be treated (see abstract), therefore, Taoda’s container would also be able to hold semiconductor wafers or any other articles to be treated as well.

Nyseth teaches the use of a plastic container storing semiconductor wafers, hence including semiconductor wafers in the container (see abstract; col. 1, ln. 26-31).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used a plastic container of Taoda to store semiconductor wafers as taught by Nyseth, because Nyseth teaches that the use of a plastic container would minimize the likelihood of contamination of the wafers with particulate contaminants (see col. 1, ln. 26-31).

In regards to claim 11, Taoda teaches the container including a closeable lid (see col. 3, ln. 39-41).

In regards to claim 27, Taoda teaches the coating comprising a gel (see col. 3, ln. 46-48).

9. Claims 10-13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto in view of Nyseth (US Pat. 5,575,394).

Goto teaches an apparatus for reducing contamination (sanitary characteristics), comprising a plastic container (see plastic packaging container, col. 13, ln. 12), and a coating on selected portions of the container, wherein the coating consists essentially of titanium dioxide (see abstract; col. 3, ln. 12-41; col. 7, ln. 2-6; col. 13, ln. 12-15). The examiner is interpreting that selected portions of the container being the container.

In regards to claim 10, Goto further teaches that the coating layer is a resin composition, comprising a cationic curable resin comprising an alicyclic epoxy resin, a photo-cationic-curing catalyst, a sensitizer, and a pigment comprising titanium dioxide (see abstract). Goto also discloses the epoxy resin being 100 parts per 250 parts by weight of titanium dioxide, the photo-catalyst being 1 to 20 parts, and the sensitizer 1.5 to 5 parts per 100 parts by weight of titanium dioxide (see col. 3, ln. 12-21). Hence, titanium dioxide would inherently be an essential component of Goto's resin composition in the coating layer, and therefore, Goto's coating layer would also inherently attract atmospheric water as presently claimed.

Note: On page 4 of the instant specification, Applicant discloses that the coating, in addition to titanium dioxide, may include other chemicals that are relatively hydrophilic. The examiner is interpreting that chemicals, such as the alicyclic epoxy resin of formula (3) (see col. 5, ln. 22-40) containing oxygen as taught by Goto, would be relatively hydrophilic.

Moreover, with respect to the limitation, "so as to attract atmospheric water molecules to produce a hydrophilic surface on the container for facilitating cleaning the container"; it has been well settled that limitations on the properties of the material worked upon or functional

limitations have been held to have insignificant patentable weight in an apparatus claim. See **MPEP** 2114-2115.

With respect to the preamble “for reducing particle contamination of an article” and the limitation “adapted for holding the article”; it has been within the skill in the art that an intended use clause in the preamble would have very little significant patentable weight in a method or apparatus claim. See **MPEP** 2111.02. Moreover, the limitation “adapted for holding the article” is not a positive limitation. In addition, since the prior art teaches a plastic container, a container should be able to hold an article; and since the prior art’s container is also coated with titanium dioxide, the prior art’s container should be able to perform the same function as that in the instant claim.

Goto differs from the instant invention because the reference does not teach at least one semiconductor wafer disposed in the container. However, Goto further teaches that the thickness of the can bottom portions differs depending upon the use of the container (see col. 11, ln. 21-24), indicating that the container would be used for different purposes.

Nyseth teaches the use of a plastic container storing semiconductor wafers, hence including semiconductor wafers in the container (see abstract; col. 1, ln. 26-31).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used a plastic container of Goto to store semiconductor wafers as taught by Nyseth, because Nyseth teaches that the use of a plastic container would minimize the likelihood of contamination of the wafers with particulate contaminants (see col. 1, ln. 26-31).

In regards to claim 11, Goto teaches the container including a closeable lid for sealing the interior of the container from the external atmosphere (plastic can) (see col. 10, ln. 15-53, col. 13, ln. 13-14).

In regards to claims 12-13, Goto teaches the container including polypropylene and polycarbonate (see col. 13, ln. 29-35).

In regards to claim 27, Goto teaches the coating comprising a gel (paint) (see col. 15, ln. 49-54; Table 1).

10. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taoda and Nyseth as applied to claim 10 above, and further in view of Goto.

Taoda and Nyseth are as set forth in claim 10 above and incorporated herein.

Taoda teaches the use of a plastic container (see col. 3, ln. 3-8). However, Taoda does not teach the specific plastic being used.

Goto teaches the use of a plastic container, including polypropylene and polycarbonate (see col. 13, ln. 29-35).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used a plastic container including polypropylene or polycarbonate, as taught by Goto, in the apparatus of Taoda. Because these polymers are highly resilient, flexible, and transparent plastic materials, the use of these polymers in the container would make the materials more moldable to form the container and would allow light to penetrate through for the purpose of decontaminating the interior of the container.

Response to Arguments

11. Applicant's arguments filed September 8, 2003 have been fully considered but they are not persuasive.

In response to applicant's request on the withdrawal of the Restriction Requirement, the restriction has been reconsidered. However, the requirement is still deemed proper for the following reason. Group I, including claims 1, 3-4, 14, 21, and 26, is directed to a process of making, whereas Group II, claims 10-13 and 27, is directed to a product. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process as claimed can be used to make numerous other materially different products.

The requirement is still deemed proper and is therefore made FINAL.

A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

On pages 7-8 of the Remarks, Applicant contends that neither Goto nor Taoda suggest using titanium dioxide in a container for minimizing particulate contamination or for storing semiconductor wafers. However, as pointed out in the prior Office Action of July 9, 2003 and paragraphs 7-8 above, since the prior art teaches a plastic container coated with titanium dioxide as recited by the presently claimed invention, the container of the prior art should be able to perform the same function.

Moreover, Applicant is reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in

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order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Furthermore, the recitation "for reducing particle contamination of an article" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Nyseth teaches the use of a plastic container for storing semiconductor wafers in order to minimize the likelihood of contamination of the wafers with particulate contaminants. Hence, one of ordinary skill in the art would have recognized that Nyseth would have modified

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the teachings of Taoda or Goto, in order to reduce possible contamination of the wafers with particulate contaminants.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 703-306-5698, or 571-272-1080 (after about 12/04/03). The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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November 24, 2003


RABON SERGENT
PRIMARY EXAMINER